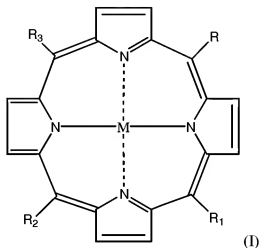


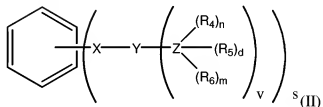
**AMENDMENTS TO THE CLAIMS**

1. (Previously Presented) Compounds of general formula (I)



wherein

R is the following group of formula (II)



wherein

X is selected from the group consisting of O, S, CH<sub>2</sub>, COO, CH<sub>2</sub>CO, O(CH<sub>2</sub>)<sub>2</sub>O, O(CH<sub>2</sub>)<sub>3</sub>O and N;

Z is selected from between N and CH<sub>2</sub>N;

Y is selected from aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 10 carbon atoms, and phenyl, or Y forms with Z a saturated or unsaturated heterocycle, selected from the group consisting of: morpholine, piperidine, pyrimidine, piperazine, pyrrolidine, pyrroline, aniline, julolidine (2,3,6,7-tetrahydro-1H,5H-pirido[ 3,2,1-*l*] quinoline, and substituted forms thereof;

R<sub>4</sub> and R<sub>5</sub>, equal or different from each other, are selected from H and alkyl groups having from 1 to 3 carbon atoms, or they form with the Z group a saturated or unsaturated heterocycle, selected from

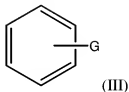
the group consisting of: morpholine, piperidine, pyrimidine, piperazine, pyrrolidine, pyrroline, aniline, julolidine (2,3,6,7-tetrahydro-1H,5H-pirido[ 3,2,1-*Ij*] quinoline), and substituted forms thereof;

R<sub>6</sub> is selected from H and aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 5 carbon atoms, comprising a saturated heterocycle selected from the group consisting of: morpholine, piperidine, piperazine, pyrrolidine, and substituted forms thereof;

d, m, and n, equal or different from each other, are selected from 0 and 1;

v and s, equal or different from each other, are integers comprised between 1 and 3;

R<sub>1</sub> is selected from H and a group of formula (III)



wherein

G is selected from H and P- (CH<sub>2</sub>)<sub>l</sub> - (W)<sub>f</sub> - J, wherein

P is selected from the group consisting of O, CH<sub>2</sub>, CO<sub>2</sub>, NHCONH and CONH;

l is an integer comprised between 0 and 5;

W is selected from the group consisting of O, CO<sub>2</sub>, CONH and NHCONH;

f is selected from between 0 and 1;

J is H or an alkyl group (CH<sub>2</sub>)<sub>q</sub>-CH<sub>3</sub>, wherein q is an integer comprised between 0 and 20;

R<sub>2</sub> and R<sub>3</sub>, equal or different from each other, are selected from between R and R<sub>1</sub>, wherein R and R<sub>1</sub> are defined as above,

M is chosen from 2H and a metal selected from the group consisting of Zn, Mg, Pt, Pd, Si(OR<sub>7</sub>)<sub>2</sub>, Ge(OR<sub>7</sub>)<sub>2</sub> and AlOR<sub>7</sub>, wherein R<sub>7</sub> is chosen from between H and C1-C15 alkyl, and pharmaceutically acceptable salts thereof,

with the exception of the following compounds:

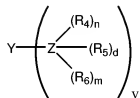
a) compound of formula (I) wherein M is 2H, R<sub>1</sub> = R<sub>3</sub> = H, R = R<sub>2</sub> is a group of formula (II) in which s is 1, X is O, Y is (CH<sub>2</sub>)<sub>3</sub>, v is 1, Z is N, n = d = 1, m is 0, and R<sub>4</sub> = R<sub>5</sub> = H; and

b) compound of formula (I) wherein M is 2H,  $R_1 = R_3 = H$ ,  $R = R_2$  is a group of formula (II) in which s is 1, X is O, Y is  $(CH_2)_3$ , v is 1, Z is N, n = d = 1, m is 0,  $R_4$  and  $R_5$  form with Z a phthalimido group.

2. (Previously Presented) Compounds of general formula (I) according to claim 1, in which the group R comprises at least one substituent bearing tertiary or quaternary nitrogen.

3. (Cancelled)

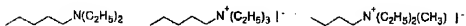
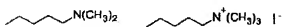
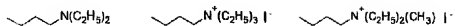
4. (Previously Presented) Compounds of general formula (I) according to claim 1, wherein the group

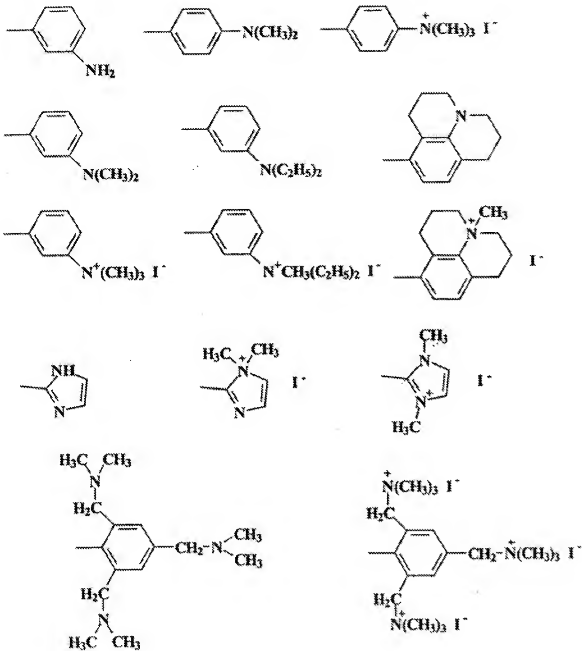


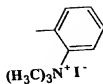
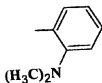
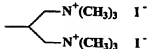
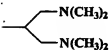
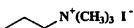
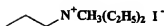
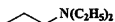
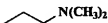
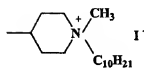
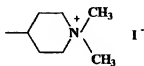
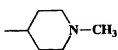
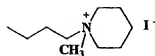
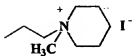
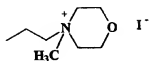
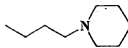
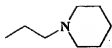
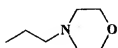
Amendment dated

After Final Office Action of May 12, 2010

is selected from the group consisting of:







5. (Original) Compounds of general formula (I) according to claim 1, selected from the group consisting of: 5,10,15-tris-[4-(2-N,N,N-trimethylammoniumethoxy)-phenyl]-20-[(4-decyloxy)-phenyl] porphyrin triiodide,  
5,10,15-tris-[4-(2-N,N,N-trimethylammoniumethoxy)-phenyl]-20-[(4-decyloxy)-phenyl]porphyrinate zinc (II) triiodide,  
5,10,15-tris-[4-(2-N,N-dimethylaminoethoxy)phenyl]-20-[(4-decyloxy)phenyl] porphyrin,  
5,10,15-tris-[4-(2-N,N-dimethylaminoethoxy)-phenyl]-20-[(4-decyloxy)phenyl] porphyrinate zinc (II),  
5,10,15-tris-[4-(N-methylpiperidin-4-yl)oxy]phenyl]-20-[(4-decyloxy)phenyl] porphyrin,  
5,10,15-tris-[4-(N,N-dimethylpiperidin-4-ium)oxy]phenyl]-20-[(4-decyloxy)phenyl] porphyrin triiodide,  
5,10,15-tris-[3-(2-morpholin-4-ylethoxy)phenyl]-20-[(4-decyloxy)phenyl]porphyrin,  
5,10,15-tris-[3-(2-methylmorpholin-4-ium)ethoxy]phenyl]-20-[(4-decyloxy)phenyl] porphyrin triiodide,  
5,10,15-tris-[4-[4-(N,N-dimethylamino)phenoxy]phenyl]-20-[(4-decyloxy)phenyl] porphyrin,  
5,10,15-tris-[4-[4-(N,N,N-trimethylammonium)phenoxy]phenyl]-20-[(4-decyloxy)phenyl] porphyrin triiodide,  
5,10,15-tris-[4-[3-(N,N-dimethylamino)phenyl]thiophenyl]-20-[(3-undecyloxy) phenyl] porphyrin,  
5,10,15-tris-[4-[3-(N,N,N-trimethylammonium)phenyl]thiophenyl]-20-[(4-undecyloxy) phenyl]porphyrin triiodide,  
5,10,15-tris-[3-(3-N,N-dimethylaminopropoxy)phenyl]-20-[(3-undecyloxy) phenyl] porphyrin,  
5,10,15-tris-[3-(3-N,N,N-trimethylammoniumpropoxy)phenyl]-20-[(3-undecyloxy) phenyl] porphyrin triiodide,  
5,10,15-tris-[4-[4-(N,N-dimethylamino)butoxy]phenyl]-20-[(4-undecyloxy) phenyl] porphyrin,  
5,10,15-tris-[4-[4-(N,N,N-trimethylammonium)butoxy]phenyl]-20-[(4-undecyloxy) phenyl]porphyrin triiodide,  
5-[4-{2,4,6-tris-[(dimethylamino)methyl]phenoxy}phenyl]-10,15,20-tris-[(4-decyloxy) phenyl] porphyrin,

5-{4-[2,4,6-tris-[(trimethylammonium)methyl]phenoxy]phenyl}-10,15,20-tris-[(4-decyloxy)phenyl]porphyrin triiodide,  
5-{3-[2-(dimethylamino)]-1-[[dimethylamino)methyl]ethoxy]phenyl}-10,15,20-tris-[(3-decyloxy)phenyl]porphyrin,  
5-{3-[2-(trimethylammonium)]-1-[(trimethylammonium)methyl]ethoxy]phenyl}-10,15,20-tris-[(3-decyloxy)phenyl]porphyrin diiodide,  
5,10,15-tris-[4-[3-(diethylamino)propoxy]phenyl]-20-[(4-decyloxy)phenyl] porphyrin,  
5,10,15-tris-[4-[3-(trimethylammonium)propoxy]phenyl]-20-[(4-decyloxy)phenyl] porphyrin triiodide,  
5,10,15-tris-[4-(2-aminoethoxy)phenyl]-20-[(4-decyloxy)phenyl] porphyrin,  
5,10,15-tris-[[4-(2-trimethylammonium)ethoxy]phenyl]-20-[(4-decyloxy)phenyl] porphyrin triiodide,  
5,10,15-tris-[[4-(N,N,N-trimethylammonium)phenoxy]carbonyl]phenyl]-20-[(4-decyloxy)phenyl]porphyrin triiodide,  
5-{4-[2-(trimethylammonium)-1-[(trimethylammonium)methyl]ethoxy]carbonyl]phenyl}-10,15,20-tris-[(3-decyloxy)phenyl]porphyrin diiodide,  
5,15-bis-[3-(3-N,N,N-trimethylammoniumpropoxy)phenyl] porphyrin diiodide,  
5,15-bis-[4-(2-piperidin-1-ylethoxy)phenyl]porphyrin,  
5,15-bis-[4-(2-N-methylpiperidin-1-iumethoxy)phenyl]porphyrin diiodide,  
5,15-bis-[4-(3-N,N-dimethylaminopropoxy)phenyl]-10,20-bis-[(3-decyloxy)phenyl]porphyrin,  
5,15-bis-[4-[3-(N,N,N-trimethylammoniumpropoxy)phenyl]-10,20-bis-[(3-decyloxy)phenyl]porphyrin diiodide,  
5,15-bis-4-[[2-(N,N-dimethylamino)ethylthio]phenyl]porphyrin,  
5,15-bis-[4-[2-(N,N,N-trimethylammonium)ethylthio]phenyl]porphyrin diiodide,  
5,15-bis-[4-[2-[3-(trimethylammonium)phenoxy]ethoxy]phenyl]porphyrin diiodide,  
5,15-bis-[4-[2-[3-(N,N,N-trimethylammonium)phenyl]-2-oxoethyl]-10,20-bis-[(3-decyloxy)phenyl]porphyrin diiodide,  
5,15-bis-[3-(3-N,N,N-trimethylammoniumpropoxy)phenyl]porphyrinate zinc(II) diiodide,  
5,15-bis-[3-(3-N,N-dimethylaminopropoxy)phenyl]porphyrinate zinc(II),



5,15-bis-[4-(4-N,N,N-trimethylammoniumphenoxy)phenyl] porphyrin diiodide,  
5,15-bis-[4-(4-aminophenoxy)phenyl]porphyrin,  
5,15-bis-[3-(4-N,N,N-dimethylaminophenoxy)phenyl]porphyrin,  
5,15-bis-[3-(4-N,N,N-trimethylammoniumphenoxy)phenyl]porphyrin diiodide,  
5,15-bis-[3-(4-N,N,N-dimethylaminophenyl)thiophenyl]porphyrin,  
5,15-bis-[3-(4-N,N,N-trimethylammoniumthiophenoxy)phenyl]porphyrin diiodide,  
5,15-bis-4-[3-(N,N-dimethylaminophenoxy)phenyl]-10,20-bis-[(4-decyloxy) phenyl]porphyrin,  
5,15-bis-4-[3-(N,N,N-trimethylammoniumphenoxy)phenyl]-10,20-bis-[(4-decyloxy)  
phenyl]porphyrin diiodide,  
5,10,15-tris-[4-[4-(N,N-dimethylamino)butoxy]phenyl]-20-[(4-undecyloxy)phenyl] porphyrinate  
zinc(II),  
5,10,15-tris-[4-[4-(N,N,N-trimethylammonium)butoxy]phenyl]-20-[(4-undecyloxy)  
phenyl]porphyrinate zinc(II) triiodide,  
5,15-bis-[4-(2-piperidin-1-ylethoxy)phenyl]porphyrinate zinc(II), and  
5,15-bis-[4-(2-N-methylpiperidin-1-iumethoxy)phenyl]porphyrinate zinc(II) diiodide.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) Pharmaceutical compositions comprising as the active principle at least a compound of general formula (I) as defined in claim 1 in combination with pharmaceutically acceptable excipients and/or diluents.

11-18. (Canceled)

19. (Cancelled)

20. (Cancelled)

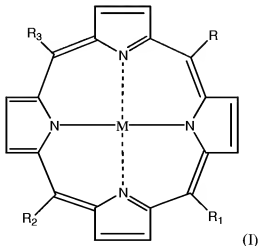
21-22. (Cancelled)

23. (Previously Presented) A method of sterilizing wounds, comprising administering to a patient in need of such a treatment an effective amount of at least a compound of general formula (I) as defined in claim 1, and thereafter irradiating the patient with light of appropriate wavelength.

24. (Cancelled)

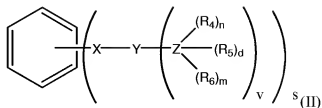
25. (Previously Presented) Compounds of general formula (I) according to claim 1, wherein  $R_6$  is selected from aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 5 carbon atoms, substituted with alkylamine or alkylammonium groups having alkyl chains comprising from 1 to 5 carbon atoms.

26. (Previously Presented) Compounds of general formula (I)



wherein

R is the following group of formula (II)



wherein

X is selected from the group consisting of O, S,  $\text{CH}_2$ ,  $\text{COO}$ ,  $\text{CH}_2\text{CO}$ ,  $\text{O}(\text{CH}_2)_2\text{O}$ ,  $\text{O}(\text{CH}_2)_3\text{O}$  and N;

Z is selected from between N and  $\text{CH}_2\text{N}$ ;

Y is selected from aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 10 carbon atoms, and phenyl or Y forms with Z a pyridine or substituted pyridine heterocycle;

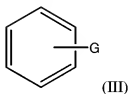
$R_4$  and  $R_5$ , equal or different from each other, are selected from H and alkyl groups having from 1 to 3 carbon atoms, or they form with the Z group a pyridine or substituted pyridine heterocycle;

$R_6$  is selected from H and aliphatic groups, linear or branched, saturated or unsaturated, having from 1 to 5 carbon atoms, or comprising a saturated heterocycle selected from the group consisting of: morpholine, piperidine, piperazine, pyrrolidine, and substituted forms thereof;

$d$ ,  $m$ , and  $n$ , equal or different from each other, are selected from 0 and 1;

$v$  and  $s$ , equal or different from each other, are integers comprised between 1 and 3;

$R_1$  is selected from H and a group of formula (III)



wherein

G is selected from H and  $\text{P}-(\text{CH}_2)_1-(\text{W})_f-\text{J}$ , wherein

P is selected from the group consisting of O,  $\text{CH}_2$ ,  $\text{CO}_2$ ,  $\text{NHCONH}$  and  $\text{CONH}$ ;

1 is an integer comprised between 0 and 5;

W is selected from the group consisting of O,  $\text{CO}_2$ ,  $\text{CONH}$  and  $\text{NHCONH}$ ;

$f$  is selected from between 0 and 1;

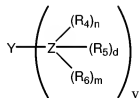
J is H or an alkyl group  $(\text{CH}_2)_q-\text{CH}_3$ , wherein  $q$  is an integer comprised between 0 and 20;

R<sub>2</sub> and R<sub>3</sub>, equal or different from each other, are selected from between R and R<sub>1</sub>, wherein R and R<sub>1</sub> are defined as above,

M is chosen from 2H and a metal selected from the group consisting of Zn, Mg, Pt, Pd, Si(OR<sub>7</sub>)<sub>2</sub>, Ge(OR<sub>7</sub>)<sub>2</sub> and AlOR<sub>7</sub>, wherein R<sub>7</sub> is chosen from between H and C1-C15 alkyl, and pharmaceutically acceptable salts thereof, with the exception of the following compounds:

- a) compound of formula (I) wherein M is 2H, R<sub>1</sub> = R<sub>3</sub> = H, R = R<sub>2</sub> is a group of formula (II) in which s is 1, X is O, Y is (CH<sub>2</sub>)<sub>3</sub>, v is 1, Z is N, n = d = 1, m is 0, and R<sub>4</sub> = R<sub>5</sub> = H; and  
b) compound of formula (I) wherein M is 2H, R<sub>1</sub> = R<sub>3</sub> = H, R = R<sub>2</sub> is a group of formula (II) in which s is 1, X is O, Y is (CH<sub>2</sub>)<sub>3</sub>, v is 1, Z is N, n = d = 1, m is 0, R<sub>4</sub> and R<sub>5</sub> form with Z a phthalimido group.

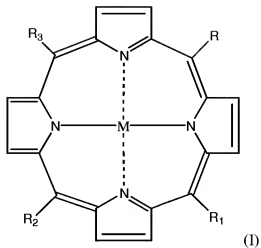
27. (Previously Presented) Compounds of general formula (I) according to claim 26, wherein the group



is selected from the group consisting of:

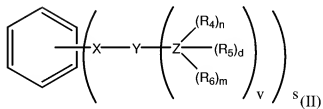


28. (Previously Presented) Compounds of general formula (I)



wherein

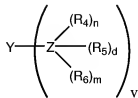
R is the following group of formula (II)



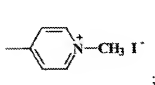
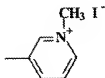
wherein

X is selected from the group consisting of O, S, CH<sub>2</sub>, COO, CH<sub>2</sub>CO, O(CH<sub>2</sub>)<sub>2</sub>O, O(CH<sub>2</sub>)<sub>3</sub>O and N;

wherein the group

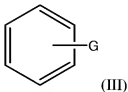


is selected from the group consisting of:



v and s, equal or different from each other, are integers comprised between 1 and 3;

R<sub>1</sub> is selected from H and a group of formula (III)



wherein

G is selected from H and P- (CH<sub>2</sub>)<sub>1</sub> - (W)<sub>f</sub> - J, wherein

P is selected from the group consisting of O, CH<sub>2</sub>, CO<sub>2</sub>, NHCONH and CONH;

l is an integer comprised between 0 and 5;

W is selected from the group consisting of O, CO<sub>2</sub>, CONH and NHCONH;

f is selected from between 0 and 1;

J is H or an alkyl group (CH<sub>2</sub>)<sub>q</sub>-CH<sub>3</sub>, wherein q is an integer comprised between 0 and 20;

R<sub>2</sub> and R<sub>3</sub>, equal or different from each other, are selected from between R and R<sub>1</sub>, wherein R and R<sub>1</sub> are defined as above,

M is chosen from 2H and a metal selected from the group consisting of Zn, Mg, Pt, Pd, Si(OR<sub>7</sub>)<sub>2</sub>, Ge(OR<sub>7</sub>)<sub>2</sub> and AlOR<sub>7</sub>, wherein R<sub>7</sub> is chosen from between H and C1-C15 alkyl, and pharmaceutically acceptable salts thereof.

29. - 34 (Cancelled)